



03 May 1996

38054.000  
13.05.00.0090

1D-00226

## MEMORANDUM

**From:**

<u>Name</u>	<u>Organization</u>	<u>fax</u>	<u>e-mail</u>
David Porter	SOUTHDIR	(803) 820-5563	dlporter@efdsouth.navfac.navy.mil

**To:**

<u>Name</u>	<u>Organization</u>	<u>fax</u>	<u>e-mail</u>
Lawson Anderson	EnSafe (Memphis)	(901) 372-6023	landerson@ensafe.com
Tonya Barker	NSA Memphis	(901) 873-7022	
Jack Carmichael	USGS (Nashville)	(615) 736 2066	jkcarmic@usgs.gov
Brian Donaldson	EPA Region IV	(404) 347-1735	donaldson.brian@epamail.epa.gov
Jordan English	TDEC (Memphis)	(901) 368-7979	
Sue Hosmer	NSA Memphis	(901) 873-5649	
Keith Johns	EnSafe (Raleigh)	(919) 851-4043	kjohns@ensafe.com
LCDR Terry Jones	NSA Memphis	(901) 873-5649	deucej@aol.com
Jim Morrison	TDEC (Memphis)	(901) 368-7979	
Robert Smith	EnSafe (Memphis)	(901) 372-6023	rsmith@ensafe.com
LT Chuck Starkey	NSA Memphis	(901) 873-5649	
Mark Taylor	SOUTHDIR	(803) 820-5563	mrtaylor@efdsouth.navfac.navy.mil
Clint Willer	TDEC (Nashville)	(615) 532-0938	cwiller@mail.state.tn.us
Rob Williamson	NSA Memphis	(901) 873-7022	

**Subj:** NSA MEMPHIS BRAC CLEANUP TEAM (BCT) MEETING, 22-24 APR 96

**Encl:** (1) Minutes from 22-24 April 1996 BCT Meeting  
(2) Draft BCT Charter  
(3) Team Assignments/Roles and Responsibilities

1. Enclosure (1) is forwarded for your review and information. As a reminder, the next BCT is scheduled for 28-30 May.
2. Based on information developed during the team training, a new BCT Charter has been developed and is forwarded as enclosure (2). Please review and provide me with comments. I would suggest that we formally adopt and sign this at the next BCT meeting.
3. As discussed at the last BCT, I have assigned roles for the next BCT meeting, as noted in enclosure (3). These responsibilities will be rotated through the team.

#### 4. Follow-up assignments are summarized below:

##### EnSafe (Lawson Anderson):

- Pending the availability of data from the additional apron area sampling:
  - (1) Develop TEM/geological information map of the area at Hangar N-126 and the surrounding apron.
  - (2) Construct 3-D model of the area at Hangar N-126 and the surrounding apron.
  - (3) Perform 3D geostatistics on data from upper and lower fluvial to determine if there is a correlation.
  - (4) Overlay old wastewater sewer lines with TEM map to determine any correlation with PCE/TCE hits. \*
- In accordance with the Deliverable Schedule, provide the following documents before the May BCT meeting:

SWMU 1	17 May
SWMU 5	10 May
SWMU 60	29 May
Voluntary Corrective Action Work Plans for SWMUs 3,7,18, & Gas Pits	29 May
Assembly D CSI	17 May
CAMP	15 May
- Prepare RAB presentation on SWMU 66 findings
- Prepare RAB presentation on preliminary data collected at tanks 336/337
- Recalculate background levels based on 13 sites.
- Conduct additional testing of soil piles at SWMU 8.
- Review surface soil data at SWMU 14, and provide Technical Memo on asphalt/sidewalk removal.

##### EPA Region IV (Brian Donaldson):

- Review deliverables to be provided in May:

SWMU 3
Assembly F work plan
SWMU 1
SWMU 5
SWMU 60
Voluntary Corrective Action Work Plans for SWMUs 3,7,18, & Gas Pits
Assembly D CSI
CAMP

##### NSA Memphis - Environmental (Tonya Barker/Rob Williamson):

- Issue service call with DynCorps to have tank pit at SWMU 19 (Navy Exchange Gas Station) capped with asphalt.
- Complete the disposal of IDW from Assembly A investigation.
- Remove and dispose of soil pile at SWMU 1 using DynCorps.
- Coordinate with TDEC on radiation survey (survey scheduled for May).
- Arrange for the disposal of remaining material at SWMU 67, pending analytical results from EnSafe.
- Arrange for the cleanup of SWMU 66 by DynCorps, including the recycling of CFC from disposed refrigerators.
- Determine demolition schedule for Building N-121.
- Investigate use of former buildings near background well No. 5 and the fire mats.

##### SOUTHDIV (David Porter):

- Coordinate with the Base Reuse Committee on the placement of the roadway at SWMU 60.
- Coordinate with the Base Reuse Committee on the possibility of near term (summer 96) innovative property transfer of the airfield and apron.
- Develop team meeting assignments.

##### SOUTHDIV (Mark Taylor):

- Coordinate HSWA Permit renewal application (coordinate with Mr. Otis Johnson at EPA Region IV and James Worthy/SOUTHDIV), including the possible revision of the application to a "letter format."
- Provide Brian Donaldson with a copy of the HSWA Permit renewal application.
- Arrange for a Data Quality Objectives course by NEPTUNE for the BCT meeting in May.
- Coordinate with Jim Morrison to incorporate NAVSEA RASO comments into the TDEC radiation survey.
- Prepare RAB presentation on SCAPS results.

TDEC (Jim Morrison):

- Organize radiation survey by TDEC personnel for May.
- Review deliverables to be provided in May:
  - SWMU 3
  - Assembly F work plan
  - SWMU 1
  - SWMU 5
  - SWMU 60
  - Voluntary Corrective Action Work Plans for SWMUs 3,7,18, & Gas Pits
  - Assembly D CSI
  - CAMP

USGS (Jack Carmichael):

- Continue to coordinate High Frequency Seismic work with the Kansas Geological Survey.
- Arrange for course on the use of modeling for BCT meeting in June.
- Prepare RAB presentation on biotransformation and preliminary data collected

3. Please call/e-mail if you have comments and/or questions: (803) 820-5610, DSN 583, e-mail: dlporter@efdsouth.navfac.navy.mil.



**NSA MEMPHIS BCT MEETING MINUTES**  
**22-24 APRIL 1996**

The NSA Memphis BRAC Cleanup Team convened at 11:00 am on Monday 22 April in the Environmental conference room, Building S-241. The following people were in attendance:

Lawson Anderson, EnSafe (Memphis)  
Jack Carmichael, USGS (Nashville)  
Brian Donaldson, EPA Region IV  
Jordan English, TDEC (Memphis)  
Jim Morrison, TDEC (Memphis)  
David Porter, SOUTHDIV  
Robert Smith, EnSafe (Memphis)  
Mark Taylor, SOUTHDIV  
Clint Willer, TDEC (Nashville)  
Rob Williamson, NSA Memphis

Randy Wilson, from the Public Works Environmental Division, requested a discussion on the tank removal work to be completed at SWMU 17. Specifically, the item for discussion was the backfilling of the hole created by the tank excavation. Jim Morrison stated that TDEC does not like dirty or potentially dirty closures. After a lengthy discussion, the BCT arrived at a decision to fill the hole with pea gravel and sand, and then cap with asphalt. The pit at SWMU 19 (Exchange Gas Station) will also be capped with asphalt (Randy Wilson will pursue this as an action item). EnSafe will revise the work plan for SWMU 17 to reflect the changes. Soil will be tested with a PID as it is removed. Soil with a PID hit or otherwise visibly contaminated will be placed in one roll-off, while presumed clean soil will be placed in another.

The meeting adjourned for lunch at 12:15 pm, and reconvened at 1:30 pm with the same people present, with the exception of Jordan English. Larry Hughes from EnSafe also joined the group, as did LT Chuck Starkey.

Larry Hughes presented findings from the geophysical investigation of SWMU 10. He noted three areas of disturbed soil, along with a pipe line, possibly from the old north side wastewater treatment plant. Lawson Anderson noted that the investigation of the area will begin on Monday 29 April, with geoprobe used to collect samples in the 3 areas of disturbed soil.

Clint Willer requested that the old wastewater sewer line maps be overlaid with geophysical map to determine any correlation. This would also serve as a possible link to PCE hits.

Old aerial photographs provided by Rob Williamson show a shack near background well No. 5 (site of PCE hit). Also, there appears to have been a large building near the fire mats. These were noted as possible sources of the PCE. Rob Williamson will investigate the uses of these former buildings.

The BCT discussed follow-up items from the March BCT meeting:

EnSafe (Lawson Anderson):

- Pending the availability of data from the additional apron area sampling:
  - (1) Develop TEM/geological information map of the area at Hangar N-126 and the surrounding apron.  
Awaiting new analytical data from the apron area.
  - (2) Construct 3-D model of the area at Hangar N-126 and the surrounding apron.  
Awaiting new analytical data. The desk top 3-D model can probably be completed by the May BCT meeting.
  - (3) Perform 3D geostatistics on data from upper and lower fluvial to determine if there is a correlation.  
Awaiting new analytical data from the apron area.
- After building N-121 is demolished, core concrete slab and collect and analyze samples from beneath the slab.  
Incorporate discussion of planned sampling in the RFI report.  
Has been incorporated into SWMU 3 RFI report.
- In accordance with the Deliverable Schedule, provide the following documents before the April BCT meeting:

SWMU 1	4 April
SWMU 3	2 April
SWMU 5	11 April
SWMU 60	19 April
SWMU 62 PRE	18 April
Assembly D CSI	15 April
Assembly F work plan	3 April
CAMP	

A revised Deliverable Schedule was provided to the BCT. SWMU 3 Final RFI Report and the Assembly F Work Plan were provided to the BCT in April. All of the other deliverables have been delayed.

- Revise Technical Memorandum for the investigation of SWMU 10.  
A revised Technical Memorandum has been provided to the BCT. BCT finalized plans for the investigation based on TEM data presented by Larry Hughes.
- Coordinate with Jim Kingsbury on the list of parameters related to biotransformation for use in all future sampling.
- The USGS has begun to collect biohazardous samples. Jack Carmichael discussed data collected to date by Jim Kingsbury. Most wells had little dissolved oxygen (ranged from 0 to 0.9 mg/l). The readings were obtained by titration; DO meter gives significantly higher readings. Sulfide was present in MW4 (east of hangar N126). These preliminary findings are positive indications that conditions are favorable for biotransformation of TCE. Jack Carmichael will present a summary of the preliminary findings at the May RAB meeting.
- Conduct off-base sampling of North Fork Creek in accordance with Technical Memorandum of 19 March.  
Sampling has been conducted; analytical results are pending.

In addition to the above follow-up items, the following issues were discussed by Lawson Anderson:

Lawson Anderson noted that 8 additional background samples are available now for a total of 13. Since the original background levels were obtained with just 5 locations, Lawson Anderson asked the BCT if background levels should be recalculated. The BCT decided that background levels should be recalculated using all 13 sites.

Lawson Anderson discussed that fish sampling from the south side sewage lagoons. The samples have been collected, and data is due in this week or the next.

The BCT discussed the Technical Memorandum for the investigation of the fuel farm (tanks 336 and 337), including Brian Donaldson's comments. Jack Carmichael requested that an additional push be added in the location of the previous TCE hit. The BCT was in agreement on the sampling scheme. Field work will begin next week. Per Lawson Anderson, we will have immediate results for VOCs, and a 2 week turn around time for all other results. The tank of the west side currently contains diesel fuel, while the tank of the east side is empty. The reuse committee has requested use of the east side tank as a non-potable water reservoir for fire fighting requirements for a proposed distribution warehouse.

Lawson Anderson presented data from the soil piles tested at SWMU 8. The results show elevated levels of dieldrin, lead, and benzo(a)pyrene. The BCT decided to pursue additional testing of the piles at 0-1 and 3-4 feet for SVOCs and pesticides (total of 4 samples).

EPA Region IV (Brian Donaldson):

- Review deliverables to be provided in April:  
North Fork Creek FOSL (provide comments by 10 April)  
SWMU 1                      SWMU 3  
SWMU 5                      SWMU 60  
SWMU 62 PRE      Assembly D CSI  
Assembly F work plan  
CAMP

Comments on FOSL were provided by letter on 17 April. Only SWMU 3 and Assembly F Work Plan were provided; other deliverables have been delayed.

NSA Memphis - Environmental (Tonya Barker/Rob Williamson):

- Coordinate 2nd week of SCAPS access to SWMU 5 and other sites/provide utility drawings for sites to be sampled.  
Has been completed.
- Complete the disposal of IDW from Assembly A investigation.  
In progress.
- Remove and dispose of soil pile at SWMU 1 using DynCorps.  
NSA Memphis is still working with DynCorps on the specifics.
- Coordinate with TDEC on radiation survey (survey scheduled for May).  
In progress (survey still scheduled for May)
- Arrange for the cleanup of SWMU 67 and oversee the operations.  
Cleanup has been completed. A 50-gallon waste oil tank with sludge, a 55-gallon drum with what appears to be water, and 2 300-gallon skid mounted gas tanks remain. EnSafe will test the gas tanks, sludge, and drum with water. NSA Memphis will handle the disposal. No stained soil or other signs of a release were observed during the cleanup. Site will be recommended for NFA.
- Assuming no contamination is found during the sampling at SWMU 66 (preliminary data available late April), arrange for the cleanup by DynCorps, including the recycling of CFC from disposed refrigerators.  
From the unvalidated data provided by Lawson Anderson and Robert Smith, the area appears innocuous. Rob Williamson will coordinate with DynCorps to begin a cleanup of the area, including the recycling of CFC from the disposed refrigerators.

- Determine demolition schedule for Building N-121.  
Rob Williamson is working with Don Litton and Roger Aitken to determine a demolition schedule.

#### SOUTHDIV (David Porter):

- Coordinate with the Base Reuse Committee on the placement of the roadway at SWMU 60.  
Base Reuse Committee has contacted the TN State Highway Department regarding their policy about construction on landfills, as well as the placement of the roadway. Awaiting a response from the highway department.
- Coordinate with the Base Reuse Committee on the possibility of near term (summer 96) innovative property transfer of the airfield and apron.  
The reuse committee is pursuing a 25 year lease as the preferred short-term solution for securing control of the airfield. FAA has approved the Base Reuse Committee's request to convey the airfield only as a public benefit, with the remaining property to be transferred under an economic development conveyance.
- Provide TDEC with letter regarding July BCT conference in Charleston.  
Has been provided.
- Schedule team building training for April BCT (23-24 April) with Gellileo Quality Institute.  
Has been scheduled.

#### SOUTHDIV (Mark Taylor):

- Coordinate HSWA Permit renewal application (coordinate with Mr. Otis Johnson at EPA Region IV and James Worthy/SOUTHDIV), including the possible revision of the application to a "letter format."  
In progress.
- Provide Brian Donaldson with a copy of the HSWA Permit renewal application.  
Will be provided.
- Arrange for a Data Quality Objectives course by NEPTUNE for the BCT meeting in May.  
Will be scheduled for 29 May.
- Coordinate with Jim Morrison to incorporate NAVSEA RASO comments into the TDEC radiation survey.  
Mark Taylor will forward RASO's comments to Jim Morrison to incorporate in the survey.
- Check funding schedule against revised Master Schedule in CAMP  
BRAC requirements are fully funded.

#### TDEC (Jim Morrison):

- Organize radiation survey by TDEC personnel for May.  
In progress. Radiation survey still scheduled for May.
  - Review deliverables to be provided in March:
 

North Fork Creek FOSL (provide comments by 10 April)	
SWMU 1	SWMU 3
SWMU 5	SWMU 60
SWMU 62 PRE	Assembly D CSI
Assembly F work plan	CAMP
- Review and approval of FOSL has been completed. Only SWMU 3 and Assembly F Work Plan were provided for review; other deliverables have been delayed.

USGS (Jack Carmichael):

- Continue to coordinate High Frequency Seismic work with the Kansas Geological Survey.  
Per Jack Carmichael, the contract for Phase I is going to USGS headquarters for approval, and field work should be conducted in May.
- Arrange for course on the use of modeling for BCT meeting in June.  
To be scheduled for 25 June.

Rob Williamson requested a discussion of SWMU 14. NSA Memphis was in the process of removing a sidewalk in the area and the work was halted due to concern about its proximity to SWMU 14. Lawson Anderson will review the surface soil data from the site and notify the team members.

Rob Williamson asked if any more investigation/decontamination work is needed for the fenced compound which held SWMUs 51, 52, and 53 (reuse committee has requested use of this area as a storage location for yellow gear). Brian Donaldson and Jim Morrison agreed that decontamination was not required.

The team discussed the agenda for the May RAB meeting. It was decided that the agenda will include results from SWMU 66, a discussion of bioremediation and preliminary results from initial bioremediation testing, and a presentation of preliminary data from tanks 336/337.

The meeting was adjourned for the day at 5:30 pm. The meeting reconvened on Tuesday morning at 8:00 am at the offices of EnSafe. The following people were present:

Lawson Anderson, EnSafe (Memphis)  
Jack Carmichael, USGS (Nashville)  
Brian Donaldson, EPA Region IV  
Jordan English, TDEC (Memphis)  
Jim Morrison, TDEC (Memphis)  
David Porter, SOUTHDIV  
Robert Smith, EnSafe (Memphis)  
Mark Taylor, SOUTHDIV  
Clint Willer, TDEC (Nashville)  
Rob Williamson, NSA Memphis

The group received training on teamwork from Galileo Quality Institute. Instructors were Sandra Piland and Lawana Martin from the City of Thomasville, Georgia. The training continued until 5:00 pm on Tuesday, and resumed at 8:00 am on Wednesday.

Items developed during the training include the following:

Vision Statement

Environmentally safe property for the best use of the community and the Navy.



### Mission Statement

The BCT, through efficient teamwork and interaction with the community, will cost effectively investigate, evaluate and remediate NSA Memphis to achieve environmentally safe property, consistent with the President's fast track cleanup objectives and regulatory requirements.

### Goal Statements

- Close out NFA SWMUs
- Remove asbestos and USTs
- Investigate GW holistically
- Explore innovative land transfer options
- Conduct remediation/removals
- Complete RFI/CMS/CMI
- Keep community informed
- Periodic review of progress and priorities
- Expedite property transfer

### Decision Making Model

- Define problem
- Present Facts
- Discussion
- Input from all parties
- review options/contingencies
- Develop consensus
- Make decision/review
- Implement decision
- Review/verify results

### Consensus Model

- Present problem/facts
- Discussion
- Review options
- Gather additional data (if necessary)
- See decision making model

### Conflict Management Model

- Clearly define roles
- Open discussion
- Respect others
- Stay focused on end results/goals
- Commitment
- Understand external restraints and work within them

### Meeting Rules

- Provide agenda input
- Summarize Decisions
- Periodic facilitator
- Communication between meetings to resolve problems before hand or facility discussion/resolution
- Discuss complex issues early in day.

### Code of Conduct

- Avoid side bar conversations
- Ask for clarification
- Speak up (make sure all can hear)
- Stay focused - avoid tangents
- Be punctual
- Keep time
- Commit to entire meeting
- Be prepared
- Regular breaks

During the training, the BCT discussed the team structure and responsibilities. It was decided that David Porter will remain as a full time team leader, but that other responsibilities (recorder, timekeeper, and gatekeeper) will be rotated through other members of the team. It was also decided that an outside facilitator will occasionally be utilized.

The meeting was adjourned at 10:30 am on Wednesday, 24 April.

# **DRAFT CHARTER**

for the

## **BRAC CLEANUP TEAM (BCT)**

### **NAVAL SUPPORT ACTIVITY MEMPHIS**

**VISION:** Environmentally safe property for the best use of the community and the Navy.

**MISSION:** The BCT, through efficient teamwork and interaction with the community, will cost effectively investigate, evaluate, and remediate NSA Memphis to achieve environmentally safe property, consistent with the President's fast track cleanup objectives and regulatory requirements.

**GOALS:**

- Accomplishment of the President's fast track cleanup objectives to expedite property transfer, while ensuring protection of public health and the environment.
- Use of innovative steps to accelerate the process, avoid "business as usual" delays, and use of a common sense approach within the constraints of existing environmental laws and regulations.
- Working together in partnership with the local community and reuse committee in meeting their needs and priorities.
- Prudent stewardship of the taxpayer's money, and the accomplishment of the cleanup in a financially responsible, reasonable, and efficient.
- The knowledge to seek, evaluate, and implement expert advice from outside sources when necessary.
- Effective communication among BCT and Project Team members, and respect for the personalities, opinions, and unique qualification and talents which each member brings to the table..
- Reinforce the team with honest feedback and continual improvement throughout the life of the project.
- Use of a systematic approach to problem solving.
- Completion of the BCT Business Plan's goals and objectives, including:
  - (1) Close-out of no further action (NFA) Solid Waste Management Units (SWMUs)
  - (2) Removal of asbestos and tanks
  - (3) Holistic investigate of groundwater
  - (4) Pursuit of innovative land transfer options
  - (5) Completion of needed remediation/removals

# BCT MEETING ASSIGNMENTS

	RECORDER/SCRIBE	TIMEKEEPER
MAY	ANDERSON	CARMICHAEL
JUNE	DONALDSON	MORRISON
JULY	SMITH	TAYLOR
AUGUST	WILLER	WILLIAMSON
SEPTEMBER	CARMICHAEL	ANDERSON
OCTOBER	MORRISON	DONALDSON
NOVEMBER	TAYLOR	SMITH
DECEMBER	WILLIAMSON	WILLER

## RECORDER/SCRIBE:

- Records pertinent ideas expressed and summarizes results at the end
- Notes date, time, and place of meeting
- Indicates team members present and absent
- Describes tools and techniques used by team
- Ensures agenda is set for next meeting
- Briefly outlines activities of the meeting
- Records team actions on flipchart when necessary
- Provides copy of notes to Team Leader to prepare minutes

## TIMEKEEPER:

- Watches the clock and reports on use of time
- Ensures meetings start and stop on time
- Schedules meetings

## TEAM LEADER:

- Plans and conducts team meetings
- Leads team through problem solving process steps
- Observes group dynamics and maintains team momentum
- Obtains outside assistance if needed
- Keeps customers aware of team progress and successes